

PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: April 10, 2018

Name of Applicant: Schellinger Construction Co, Inc.

Source: Portable Generator Engine

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Montana Air Quality Permit Application Number 5202-00.

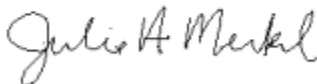
Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Quality Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by May 10, 2018. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,



Julie A. Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626



Rhonda Payne
Environmental Science Specialist
Air Quality Bureau
(406) 444-5287

JM:RP
Enclosure

MONTANA AIR QUALITY PERMIT

Issued To: Schellinger Construction Co, Inc.
P.O. Box 39
Columbia Falls, MT
59912

MAQP: #5202-00
Application Complete: 3/7/2018
Preliminary Determination Issued: 4/10/2018
Department's Decision Issued:
Permit Final:

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Schellinger Construction Co, Inc. (Schellinger) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Permitted Equipment

Schellinger proposes to install and operate a Tier 2 2,220 brake horsepower (bhp) diesel engine/generator set.

B. Plant Location

The Schellinger portable diesel engine/generator will initially be located at Township 30N, Range 21W, Section 21 in Flathead County, Montana. However, MAQP #5202-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.*

Addendum #1 will apply to the Schellinger engine/generator set while operating at locations in or within 10 km of designated PM₁₀ nonattainment areas, including the Carlson Pit (home pit).

SECTION II: Conditions and Limitations

A. Emission Limitations

1. All visible emissions from any equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
2. Schellinger shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
3. Schellinger shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.2 (ARM 17.8.749).

4. The maximum capacity of the engine that drives the generator shall not exceed 2220 hp and the engine shall be compliant with the Environmental Protection Agency's (EPA) non-road compression-ignition engine Tier 2 or higher, emission standards pursuant to 40 CFR Part 89.112 (ARM 17.8.749).
5. Operation of the diesel engine driving the generator shall not exceed 8500 hours during any rolling 12-month time period (ARM 17.8.1204).
6. If the permitted equipment is used in conjunction with any other equipment owned or operated by Schellinger, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
7. Schellinger shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart III; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this diesel engine/generator set is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. Schellinger shall supply the Department with annual fuel consumption for the engine, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. Schellinger shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).
4. Schellinger shall maintain records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Schellinger as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).
5. Schellinger shall document, by month, the hours of operation of the diesel engine/generator. By the 25th day of each month, Schellinger shall total the hours of operation for the diesel engine/generator for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. Schellinger shall annually certify that its emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

D. Notification

Schellinger shall provide the Department with written notification of the actual start-up date of the diesel engine/generator postmarked within 15 days after the actual start-up date (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Schellinger shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment such as Continuous Emission Monitoring Systems (CEMS) or Continuous Emissions Rate Monitoring System (CERMS), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Schellinger fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Schellinger of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the permitted source.
- G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Schellinger may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Schellinger shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis
Schellinger Construction Co, Inc.
MAQP #5202-00

I. Introduction/Process Description

Schellinger Construction Co, Inc. (Schellinger) owns and operates a portable engine/generator set.

A. Permitted Equipment

The following list of permitted equipment is provided for reference as portions MAQP #5202-00 are written de minimis friendly, whereby operational flexibility is provided so that alternate equipment may be utilized as long as maximum permitted capacities are not exceeded. See Section II of the MAQP for limitations and/or conditions.

- One Cummins QSK50-G4 2,220 brake horsepower (bhp) diesel engine/generator (United States Environmental Protection Agency Tier 2-certified).

B. Source Description

Schellinger's initial location is the Carlson Site home pit which is located at Township 30N, Range 21W, Section 21 (48.3489279, -114.294707), in Flathead County, Montana. The engine/generator set is used to provide power for separately permitted crushing and screening operations.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Schellinger shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
11. ARM 17.8.230 Fluoride in Forage

Schellinger must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Schellinger shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Schellinger is potentially considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart.

Based on the information submitted by Schellinger, the CI ICE to be used under MAQP #5202-00 is potentially subject to this subpart if the engine remains at a single location for more than 12 months. Additionally, Schellinger may substitute CI ICE equipment, therefore applicability to this subpart may apply to engines in the future and shall be dependent upon the date of construction and/or manufacture of the diesel engine/generator used.

7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. Based on the information submitted by Schellinger, the diesel-fired engine associated with MAQP 5202-00 is potentially applicable to NESHAP (40 CFR Part 63), as follows:
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.
 - b. 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. As Schellinger is considered an area source of HAP emissions and operates RICE equipment, the engine is potentially subject to this subpart depending on the location, nature and duration of operation. Since the RICE to be used under MAQP #5202-00 is intended to be portable, Schellinger may not be required to comply with the applicable requirements of 40 CFR 63, Subpart ZZZZ. However, this subpart would become applicable if Schellinger constructed and operated a RICE that remains in a location for more than 12 months.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Schellinger submitted the appropriate permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Schellinger has a PTE greater than 15 tons per year of oxides of nitrogen (NO_x), carbon monoxide (CO), volatile organic compounds (VOCs), sulfur dioxide (SO₂); therefore, an air quality permit is required.
 3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Schellinger submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Schellinger submitted an affidavit of publication of public notice for the March 5 issue of the *Daily Inter Lake*, a newspaper of general circulation in the Town of Kalispell in Flathead County, as proof of compliance with the public notice requirements.
 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
 8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Schellinger of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications-Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #5202-00 for Schellinger, the following conclusions were made:
 - a. The facility's PTE is not less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is potentially subject to a current NSPS (40 CFR 60, Subpart IIII).
 - e. This facility is potentially subject to a current NESHAP (40 CFR 63, Subpart ZZZZ).
 - f. This source is not a Title IV affected source.
 - g. This source is not a solid waste combustion unit.

- h. This source is not an EPA designated Title V source.

Schellinger requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on these limitations, the Department determined that this facility is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source will be subject to the Title V Operating Permit Program.

- i. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

- 3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3)(a) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or modified source. Schellinger shall install on the new or modified source the maximum air pollution control capability which is technologically practicable and economically feasible, except that BACT shall be utilized.

A. Diesel Engine/Generator

Due to the limited amount of emissions produced by the diesel-fired engine used in association with MAQP #5202-00 and the lack of cost effective add-on controls, such add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel-fired engines.

In addition, any existing or new diesel-fired engine would likely be required to comply with the federal engine emission limitations NSPS emission limitations for stationary compression ignition engines (40 CFR 60, Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). Therefore, the Department has determined that compliance with applicable federal standards and proper operation and maintenance of the engines constitutes BACT for this engine.

IV. Emission Inventory**

Emission Source	tons/year						
	PM	PM ₁₀	PM _{2.5}	NO _x	CO	VOC	SO ₂
2,220 bhp Cummins diesel generator	3.12	3.12	3.12	99.84	54.08	23.72	19.34
Total Emissions*	3.12	3.12	3.12	99.84	54.08	23.72	19.34
<i>*Assuming 8,500 hr/yr operation</i>							

** CO = carbon monoxide

(fil) = filterable

HAPs = hazardous air pollutants

hp = horsepower

lb = pound

N/A = not applicable

ND = no data available

NO_x = oxides of nitrogen

PM = particulate matter

PM₁₀ = particulate matter with an aerodynamic diameter of 10 microns or less

PM_{2.5} = particulate matter with an aerodynamic diameter of 2.5 microns or less

SO₂ = sulfur dioxide

TPH = tons per hour

TPY = tons per year

VOC = volatile organic compounds

yr = year

Footnotes:

- Inventory reflects enforceable limits on hours of operation to keep emissions below the Title V threshold of 100 tpy of any pollutant.

2,220 bhp Cummins diesel engine/generator set

Operational Capacity of Engine = 2,220 hp

2,220 hp

Manuf data

generator = 1,656 kw

1,656 kw

Hours of Operation = 8,500 hours/yr

8,500 hours/yr

PM Emissions:

Emission Factor =

0.150 g/hp-hr

(40 CFR 89 Subpart B, Table 1)

Calculation: (6,240.12 lbs/yr) * (ton/2000 lb) =

3.12 ton/yr

Calculation: (2,220 hp) * (8,500 hours/yr) * (0.150 g/hp-hr) * 0.0022046 lb/g

=

6,240.12 lbs/yr

PM₁₀ Emissions:

Emission Factor =

0.150 g/hp-hr

(40 CFR 89 Subpart B, Table 1)

Calculation: (6,240.12 lbs/yr) * (ton/2000 lb) =

3.12 ton/yr

Calculation: (2,220 hp) * (8,500 hours/yr) * (0.150 g/hp-hr) * 0.0022046 lb/g

=

6,240.12 lbs/yr

PM_{2.5} Emissions:

Emission Factor =

0.150 g/hp-hr

(40 CFR 89 Subpart B, Table 1)

Calculation: (6,240.12 lbs/yr) * (ton/2000 lb) =

3.12 ton/yr

Calculation: (2,220 hp) * (8,500 hours/yr) * (0.150 g/hp-hr) * 0.0022046 lb/g

=

6,240.12 lbs/yr

NO_x Emissions:

	Emission Factor =	4.80	g/hp-hr	(40 CFR 89 Subpart B, Table 1)
Calculation: (199,683.85 lbs/yr) * (ton/2000 lb) =		99.84	ton/yr	
Calculation: (2,220 hp) * (8,500 hours/yr) * (4.80 g/hp-hr) * 0.0022046 lb/g =		199,683.85	lbs/yr	

CO Emissions:

	Emission Factor =	2.60	g/hp-hr	(40 CFR 89 Subpart B, Table 1)
Calculation: (108,162.09 lbs/yr) * (ton/2000 lb) =		54.08	ton/yr	
Calculation: (2,220 hp) * (8,500 hours/yr) * (2.60 g/hp-hr) * 0.0022046 lb/g =		108,162.09	lbs/yr	

VOC Emissions:

	Emission Factor =	0.003	lbs/hp-hr	
Calculation: (47,441.07 lbs/yr) * (ton/2000 lb) =		23.72	ton/yr	(exhaust + crankcase)
Calculation: (2,220 hp) * (8,500 hours/yr) * (0.00251 lbs/hp-hr) =		47,441.07	lbs/yr	

SO_x Emissions:

	Emission Factor =	0.002	lbs/hp-hr	(AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (38,683.50 lbs/yr) * (ton/2000 lb) =		19.34	ton/yr	
Calculation: (2,220 hp) * (8,500 hours/yr) * (0.00205 lbs/hp-hr) =		38,683.50	lbs/yr	

V. Existing Air Quality

MAQP #5202-00 and Addendum 1 are for a facility that will locate at sites in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. The more stringent operating conditions contained in the addendum will minimize any potential impact on the nonattainment areas and will protect the national ambient air quality standards. Also, this facility is a portable source that would be expected to operate on an intermittent and temporary basis and any effects on air quality would be expected to be minor and short-lived.

VI. Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area. Furthermore, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and of limited duration.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #5202-00, the Department determined that the impact from this permitting action will be minor.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
	X	5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
	X	5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

IX. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Air, Energy & Mining Division
Air Quality Bureau
P.O. Box 200901, Helena, MT 59620
(406) 444-3490

ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Schellinger Construction Co, Inc.

Montana Air Quality Permit number (MAQP): 5202-00

EA Draft: 4/10/2018

EA Final:

Permit Final:

1. *Legal Description of Site:* Schellinger Construction Co, Inc. (Schellinger) proposes to operate at a location currently used for crushing and screening. The legal site description is Section 21 in Township 30N, Range 21W in Flathead County, Montana.
2. *Description of Project:* Schellinger is proposing to operate a 2,220 brake horsepower (bhp) diesel-fired engine/generator set.
3. *Objectives of Project:* Increased business and revenue for Schellinger and provide a service to the community in their infrastructure projects. The new engine would provide additional power for crushing and screening operations.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no action" alternative. The "no action" alternative would deny the issuance of the MAQP to the facility. Schellinger would be denied the opportunity to expand their business and provide construction products to the nearby community. Any potential air emission increases that would be authorized by issuing the MAQP would not occur. However, the Department does not consider the "no action" alternative to be appropriate because Schellinger has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no action" alternative was eliminated from further consideration. Other alternatives considered were discussed in the Best Available Control Technology analysis.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5202-00.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. *SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS:* The following comments have been prepared by the Department.

A. *Terrestrial and Aquatic Life and Habitats*

The proposed project would allow for operation of a portable diesel-fired engine/generator set. Conditions requiring control mechanisms have been placed within MAQP #5202-00 to ensure that only minor air quality impacts would occur. Additionally, limitations established within MAQP #5202-00 would minimize air pollution. Overall, any adverse impact on terrestrial and aquatic life and habitats is anticipated to be minor.

B. *Water Quality, Quantity and Distribution*

There is a potential for this source to affect water quality, quantity and distribution. However, MAQP #5202-00 includes requirements to mitigate fugitive dust emissions associated with the operation of the engine/generator set. Therefore, the project would have minor impacts to water quality, quantity or distribution in the area.

C. *Geology and Soil Quality, Stability and Moisture*

This permitting action would have an effect on geology and soil properties with land disturbances from the facility. The Department determined that there would be impacts from deposition from dispersion characteristics of pollutants and the atmosphere. The impacts would be mitigated through conditions that would be enforced through MAQP #5202-00.

D. *Vegetation Cover, Quantity, and Quality*

There would be no impacts on existing vegetation cover, quantity and quality as the site is currently a permitted gravel pit. The existing surrounding land is currently industrial in nature. The PM, PM₁₀, and PM_{2.5} emissions from the diesel engine/generator set are minimal and would likely have no effect on the surrounding vegetation. Additionally, the air quality permit associated with this project would contain limitations to minimize the effect of the emissions on the surrounding environment.

E. *Aesthetics*

The permitting of the diesel-fired engine/generator set would increase the amount of equipment on the property and create additional noise while in operation. While this may have a minor impact on aesthetics, it is consistent with the type of industrial equipment often used in gravel pits.

F. *Air Quality*

The air quality of the area would realize minor impacts from the proposed project because the facility would emit the following air pollutants: PM, PM₁₀, PM_{2.5}, NO_x, SO₂, CO and VOCs. These emissions would be minimized by limitations and conditions that would be included in MAQP #5202-00. While deposition of pollutants would occur because of the new equipment, the Department determined that the impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants, the atmosphere (wind speed, wind direction, ambient temperature, etc.), and conditions that would be placed in MAQP #5202-00.

G. *Unique Endangered, Fragile, or Limited Environmental Resources*

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department completed a species of concern report through the environmental summary function shared by the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. Search results identified a number of species within the search radius. Species of concern include the Hoary Bat, Little Brown Myotis, Great Blue Heron, Evening Grosbeak, Brown Creeper, Bobolink, Bull Trout, Pygmy Whitefish and Westslope Cutthroat Trout. Because potential emission levels are minor, and disturbance is limited, the Department has determined that there will be a minor disturbance to unidentified unique, endangered, fragile, or limited environmental resources in the area.

H. *Sage Grouse Executive Order*

The Department recognizes the site location is not within the Greater Sage Grouse Habitat Area as defined by Executive Order No. 12-20158.

I. *Demands on Environmental Resource of Water, Air and Energy*

The proposed project would have impacts on the demands for the environmental resources of air and water because the facility would be a source of air pollutants that could deposit on local waters and discharge into the local ground water supply. Deposition of pollutants would occur as a result of operating the facility; however, as explained in Section 7.F of this EA, the Department determined that any impacts on air and water resources from the pollutants (including deposition) would be mitigated by the conditions enforced in MAQP #5202-00. The Department determined that controlled emissions from the source would not cause or contribute to a violation of any ambient air quality standard and the ground water supply is protected by the MPDES permit. The Department does not expect any impacts to the energy demand.

J. *Historical and Archaeological Sites*

The Department contacted the State Historical Preservation Office (SHPO) in an effort to disclose any potential to alter historical places or buildings. SHPO searched the location of the proposed home pit for the diesel engine/generator set and determined that there are no documented records. It is SHPO's position that any structure over fifty years of age is considered historic. As long as there will be no disturbance or alteration to structures over fifty years of age, SHPO believes there is a low likelihood cultural properties will be impacted.

K. *Cumulative and Secondary Impacts*

The proposed project would cause minor effects on the physical and biological aspects of the human environment because the project would cause an increase in emissions of PM, PM₁₀, PM_{2.5}, CO, VOC and NO_x and SO₂ in the proposed area. The conditions in MAQP #5202-00 ensure that air quality impacts would be mitigated. Limitations would be established in the permit to minimize air pollution.

8. *SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS*: The following comments have been prepared by the Department.

A. *Social Structures and Mores*

The proposed project would not alter the social structure and mores as the current land use is an open cut pit and would be used for industrial purposes. The land is privately owned and would operate under an agreement with the land owner.

B. *Cultural Uniqueness and Diversity*

The proposed project would not impact the cultural uniqueness and diversity of the area because the proposed facility would operate within an existing gravel pit and would be intermittent and temporary in operation. Therefore, there would not be any impacts expected to the cultural uniqueness and diversity.

C. *Local and State Tax Base and Tax Revenue*

The proposed project would have little, if any, impact on the local and state tax base and tax revenue because the engine/generator set would be a minor industrial source of emissions and would have seasonal and intermittent operations. Furthermore, the impacts to local tax base and revenue would expect to be minor because the source would be portable and the money generated for taxes would be widespread.

D. *Agricultural or Industrial Production*

The area surrounding the gravel pit is agricultural with some rural residential. The operation of the engine/generator set would have only a minor impact on local agricultural or industrial production since the facility would be a minor source. Because minimal deposition of air pollutants would occur on the surrounding land (as described in Section 7.F of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the

facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 7.D of this EA.

E. *Human Health*

The proposed project would result in minor, if any, impacts to human health. As explained in Section 7.F of this EA, deposition of pollutants would occur; however, the Department determined that the proposed project would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to be protective of human health. Overall any impacts to public health would be minor.

F. *Access to and Quality of Recreational and Wilderness Activities*

No impacts to access and quality of recreational and wilderness activities in the project area are anticipated.

G. *Quantity and Distribution of Employment*

The proposed project would have minor impacts on the quantity and distribution of employment as six new employees would be required to operate the engine/generator set and the operations for which it would provide electricity. Any impacts to the quantity and distribution of employment would be minor due to the relatively small size of the operation.

H. *Distribution of Population*

The proposed project would have minor impacts on the employment and population of the area as several new employees would be required for the addition of the new equipment. However, any impacts to the quantity and distribution of employment from construction related employment would be minor due to the relatively small size of the facility. Overall, any impacts to the distribution of population in the area would be minor.

I. *Demands for Government Services*

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue MAQP #5202-00 and, in the future, to assure compliance with applicable rules, standards, and conditions that would be contained in MAQP #5202-00. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size of the facility.

J. *Industrial and Commercial Activity*

Only minor impacts would be expected on local industrial and commercial activity because the proposed project would represent only a minor increase in the industrial and commercial activity in the area.

K. *Locally Adopted Environmental Plans and Goals*

The Department is not aware of any locally adopted environmental plans and goals affected by issuing MAQP #5202-00. This permit would contain limits for protecting air quality and keeping facility emissions in compliance with any applicable ambient air quality standards. Because the project is small, any impacts from the facility would be minor.

L. *Cumulative and Secondary Impacts*

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the diesel engine/generator set, the industrial production, employment, and tax revenue (etc.) impacts resulting from the proposed project would be minor. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #5202-00.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a diesel engine/generator set. MAQP #5202-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program – Montana Sage Grouse Conservation Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Quality Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: R. Payne

Date: 4/2/2018

Addendum 1
Schellinger Construction Co, Inc.
Montana Air Quality Permit (MAQP) #5202-00

An addendum to MAQP #5202-00 is hereby granted to Schellinger Construction Co, Inc. (Schellinger) pursuant to Section 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment:

Schellinger owns and operates a portable diesel-fired engine/generator set not to exceed 2220 brake horsepower (bhp). The facility will initially be located in Section 21, Township 30N, Range 21W in Flathead County, Montana.

II. Seasonal and Site Restrictions – **Winter and Summer Seasons**

Addendum 1 applies to the Schellinger facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31) – The only location in or within 10 km of a PM₁₀ nonattainment area where Schellinger may operate is:
 - 1. Carlson Pit in Section 21, Township 30N, Range 21W in Flathead County; and
 - 2. Any other site that may be approved, in writing, by the Department of Environmental Quality (Department).
- B. During the summer season (April 1-September 30) – Schellinger may operate at any location in or within 10 km of the Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.
- C. Schellinger shall comply with the limitations and conditions contained in Addendum 1 to MAQP #5202-00 while operating in or within 10 km of any of the previously identified PM₁₀ nonattainment areas. Addendum 1 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum 1 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

- A. Operational Limitations and Conditions – Summer Season Conditions
 - 1. Schellinger shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).

2. Schellinger shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).

B. Operation Limitations and Conditions – Winter Season Conditions

1. Schellinger shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
2. Schellinger shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).

C. Operational Reporting Requirements

1. If this diesel engine/generator set is moved to another nonattainment location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. Production information for the sites covered by this addendum must be maintained for five years and submitted to the Department upon request. The information must include (ARM 17.8.749):
 - a. Daily hours of operation at each site.
 - b. Daily hours of operation and the hp for each engine at each site.
 - c. Fugitive dust information consisting of the daily total miles driven on unpaved roads within the operating site for all plant vehicles.

Addendum 1 Analysis
Schellinger Construction Co, Inc.
Montana Air Quality Permit (MAQP) #5202-00

I. Permitted Equipment

Schellinger owns and operates a portable diesel-fired engine/generator set not to exceed 2220 brake horsepower (bhp); and associated material handling and processing equipment.

II. Source Description

Schellinger uses this engine/generator set to support crushing/screening plants to crush, screen, and sort sand and gravel materials for use in various construction operations.

III. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

- A. ARM 17.8.749 Conditions for Issuance of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- B. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- C. ARM 17.8.765 Transfer of Permit. An air quality permit may be transferred from one location to another if:
 - 1. Written notice of intent to transfer location and proof of public notice are sent to the Department;
 - 2. The source will operate in the new location for a period of less than 1 year; and
 - 3. The source will not have any significant impact on any nonattainment area or any Class I area.

IV. Emission Inventory

Maximum Process Rate: 2200 bhp
 Maximum Hours of Operation: 24 hrs/day (Permit Limit Summertime [unrestricted])

CONTROLLED	pounds/day							
Emission Source	PM	PM₁₀	PM_{2.5}	NO_x	CO	VOC	SO₂	Total HAPs
2200 hp Diesel Engine	17.42	17.42	17.42	349.11	0.78	132.74	108.24	--
Total Emissions	17.42	17.42	17.42	349.11	0.78	132.74	108.24	0.00

Maximum Process Rate: 2220 bhp
 Maximum Hours of Operation: 24 hrs/day (Permit Limit Wintertime)

CONTROLLED	pounds/day							
Emission Source	PM	PM₁₀	PM_{2.5}	NO_x	CO	VOC	SO₂	Total HAPs
2220 hp Diesel Engine	17.42	17.42	17.42	349.11	0.78	132.74	108.24	--
Total Emissions	17.42	17.42	17.42	349.11	0.78	132.74	108.24	0.00

Footnotes:

a. Inventory reflects maximum hours of operation in both summer and winter. Emissions are below 82 lbs/day and screen modeling shows an ambient impact not exceeding 5 µm/m³

Diesel Engine

Note: Emissions are based on the power output of the engine (2220 hp).

Operational Capacity of Engine = 2,220 hp 2,220 hp
 Hours of Operation = 24.00 hrs/day (Summer Hours) 24.00 hrs/day (Summer Hours)
 Hours of Operation = 24.00 hrs/day (Winter Hours) 24.00 hrs/day (Winter Hours)

Total PM/PM₁₀/PM_{2.5} Emissions:

Emission Factor = 0.00033 lb/hp-hr (40 CFR 89 Subpart B, Table 1) 3.30E-04 lb/hp-hr (40 CFR 89 Subpart B, Table 1)
 Calculation: (24 hrs/day) * (2,220 hp) * (0.00033 lb/hp-hr) = 17.58 lb/day (Summer Hours)
 Calculation: (24 hrs/day) * (2,220 hp) * (0.00033 lb/hp-hr) = 17.58 lb/day (Winter Hours)

NO_x Emissions:

Emission Factor = 0.006612 lb/hp-hr (40 CFR 89 Subpart B, Table 1) 0.006612 lb/hp-hr (40 CFR 89 Subpart B, Table 1)
 Calculation: (24 hrs/day) * (2,220 hp) * (0.006612 lb/hp-hr) = 352.29 lb/day (Summer Hours)
 Calculation: (24 hrs/day) * (2,220 hp) * (0.006612 lb/hp-hr) = 352.29 lb/day (Winter Hours)

CO Emissions:

Emission Factor = 0.0000147 lbs/hp-hr (40 CFR 89 Subpart B, Table 1) 1.47E-05 lbs/hp-hr (40 CFR 89 Subpart B, Table 1)
 Calculation: (24 hrs/day) * (2,220 hp) * (0.0000147 lbs/hp-hr) = 0.78 lb/day (Summer Hours)
 Calculation: (24 hrs/day) * (2,220 hp) * (0.0000147 lbs/hp-hr) = 0.16 lb/day (Winter Hours)

VOC Emissions:

Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)	2.51E-03	lbs/hp-hr	(AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)
Calculation: (24 hrs/day) * (2,220 hp) * (0.0025141 lbs/hp-hr) = 133.95 lb/day (Summer Hours)	133.95	lb/day	(Summer Hours)
Calculation: (24 hrs/day) * (2,220 hp) * (0.0025141 lbs/hp-hr) = 27.91 lb/day (Winter Hours)	133.95	lb/day	(Winter Hours)

SO_x Emissions:

Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	2.05E-03	lbs/hp-hr	(AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (24 hrs/day) * (2,220 hp) * (0.00205 lbs/hp-hr) = 109.22 lb/day (Summer Hours)	109.22	lb/day	(Summer Hours)
Calculation: (24 hrs/day) * (2,220 hp) * (0.00205 lbs/hp-hr) = 22.76 lb/day (Winter Hours)	109.22	lb/day	(Winter Hours)

CO₂ Emissions:

Emission Factor = 1.15 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	1.15	lbs/hp-hr	(AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (24 hrs/day) * (2,220 hp) * (1.15 lbs/hp-hr) = 61,272.00 lb/day (Summer Hours)	61272.00	lb/day	(Summer Hours)
Calculation: (24 hrs/day) * (2,220 hp) * (1.15 lbs/hp-hr) = 12,765.00 lb/day (Winter Hours)	61272.00	lb/day	(Winter Hours)

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀). Due to exceedances of the national standards for PM₁₀, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM₁₀. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM₁₀ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies identified these sources to be the major contributors to PM₁₀ emissions.

MAQP #5202-00 and Addendum 1 are for a portable diesel engine/generator set to be used to support crushing/screening plants that will locate at sites in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. The more stringent operating conditions contained in the addendum will minimize any potential impact on the nonattainment areas and will protect the national ambient air quality standards. Also, this facility is a portable source that would be expected to operate on an intermittent and temporary basis and any effects on air quality would be expected to be minor and short-lived.

VI. Air Quality Impacts

MAQP #5202-00 and Addendum 1 will cover the operations of this portable crushing/screening plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program and those areas that are tribal lands.

Addendum 1 will cover the operations of this portable crushing/screening plant, while operating in or within 10 km of a PM₁₀ nonattainment area during the winter months (October 1 through March 31) as well as during the summer months (April 1 through September 30).

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted the following private property taking and damaging assessment:

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
	X	5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
	X	5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

Addendum Analysis Prepared by: R. Payne

Date: 4/4/2018